

the support device (6) comprising at least three support members (8), which are arrangeable to absorb relative movements between the centrifuge rotor (4) and the frame member (7) and which each has a longitudinal axis (s) and is designed to be provided between the bearing member (3) and the frame member (7) so that the longitudinal axis (s) extends outwardly with respect to the axis (x) of rotation.

wherein each support member (8) comprises a helical spring element (10), having a wire extending in an essentially helical path in such a manner that a space (11) is formed between adjacent rounds of the wire, and wherein each support member (8) comprises a rubber material (12) provided at least in said space (11) and arranged to increase the stiffness of the support member (8) and at the same time to provide a dampening action of the support member (8).--

--2. A support device according to claim 1, wherein the rubber material (12) is arranged in such a manner that it produces a dampening effect to said relative movements.--

--3. A support device according to claim 1, wherein the wire is at least partly embedded in the rubber material (12).

--4. A support device according to claim 1, wherein the wire is substantially embedded in the rubber material (12).

--5. A support device according to claim 1, wherein the wire is manufactured in a spring material and the spring material is fixedly connected to the rubber material (12).--

--6. (Twice Amended) A support device according to claim 5, wherein the spring material is fixedly connected to the rubber material (12) by a vulcanization.--

--7. A support device according to claim 1, wherein the longitudinal axis (s) of the support members (8) extends substantially radially with respect to the axis (x) of rotation.--

--8. A support device according to claim 1, further comprising means (15) which are arranged to enable a pretensioning of the helical spring elements (10) in the direction of the respective longitudinal axis (s).--

--9. A support device according to claim 1, wherein each support member (8) is provided in a space (9) which is delimited by a stop member (15).--

--10. A support device according to claim 9, wherein the stop member (15) is positionable in different positions along the longitudinal axis (s).--

Please add claims 11-20, as follows.

--11. A centrifugal separator comprising:

a centrifuge rotor;

a frame member;

a bearing member (3);

an axis of rotation (x);

a spindle which carries the centrifuge rotor and which is provided in the frame member (7) by means of the bearing member (3) to be rotatable about the axis (x) of rotation;  
and

a spindle support device for the spindle (1), wherein the support device (6) comprises at least three support members (8), which are arranged to absorb relative movements between the centrifuge rotor (4) and the frame member (7) and which each is provided between the bearing member (3) and the frame member (7) and has a longitudinal axis (s) extending outwardly with respect to the axis (x) of rotation, wherein each support member (8) comprises a helical spring element (10), having a wire extending in an essentially helical path in such a manner that a space (11) is formed between adjacent rounds of the wire, wherein each support member (8) comprises a rubber material (12) provided at least in said space (11) and arranged to increase the stiffness of the support member (8) and at the same time to provide a dampening action of the support member (8).--

--12. A separator according to claim 11, wherein the rubber material (12) is arranged in such a manner that it produces a dampening effect to said relative movements.--

--13. A separator according to claim 11, wherein the wire is at least partly embedded in the rubber material (12).--

--14. A separator according to claim 11, wherein the wire is substantially embedded in the rubber material (12).--

--15. A separator according to claim 11, wherein the wire is manufactured in a spring material and the spring material is fixedly connected to the rubber material (12).--

--16. A separator according to claim 15, wherein the spring material is fixedly connected to the rubber material (12) by a vulcanization.--

--17. A separator according to claim 11, wherein the longitudinal axis (s) of the support members (8) is provided to extend substantially radially with respect to the axis (x) of rotation.--

--18. A separator according to claim 11, further comprising means (15) which are arranged to enable a pretensioning of the helical spring elements (10) in the direction of the respective longitudinal axis (s).--

--19. A separator according to claim 11, wherein each support member (8) is provided in a space (9) which is delimited by a stop member (15).--

--20. A separator according to claim 19, wherein the stop member (15) is positionable in different positions along the longitudinal axis (s).--